

Date: Sat, 11 Jun 94 04:30:15 PDT  
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>  
Errors-To: Ham-Ant-Errors@UCSD.Edu  
Reply-To: Ham-Ant@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Ant Digest V94 #179  
To: Ham-Ant

## Ham-Ant Digest

Sat, 11 Jun 94

Volume 94 : Issue 179

## Today's Topics:

2 antennas into receiver?  
Newbie Continues Pondering J-Poles...

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>  
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 10 Jun 1994 16:42:20 GMT  
From: l11-winken.llnl.gov!overload.lbl.gov!agate!msuinfo!netnews.upenn.edu!  
eniac.seas.upenn.edu!depolo@ames.arpa  
Subject: 2 antennas into receiver?  
To: ham-ant@ucsd.edu

In article <brett\_miller.290.0008C5D5@ccm.hf.intel.com>  
brett\_miller@ccm.hf.intel.com (Brett Miller - N70LQ) writes:  
>I have an AOR AR3000A that has coverage from about 100KHz to 2 GHz. It only  
>has one BNC connector on the back so I am wondering if there are any  
>disadvantages to hooking a BNC T connector to it with one end going to a  
>discone, while the other end goes to a random wire antenna (w/tuner).

Not exactly an optimal way of doing things, but in your receive-only configuration, it may work tolerably well. There are several issues here, including impedance matching and constructive/destructive interference. Although, with a random longwire, impedance concerns go out the window.

A better approach would be to either have a coaxial switch to select between the two antennas, or to combine the two using a combiner. A combiner for this type of application could be built fairly easily.

Basically, it would consist of a high-pass and low-pass filter connected to a common output, with the discone and the longwire feeding the inputs respectively.

I can't see the logic in a scanner with coverage that wide that they didn't bother to put separate antenna connections on in the first place. Bad design IMHO.

--- Jeff

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Jeff DePolo WN3A Twisted Pair: (215) 337-7383H 387-3059W  
depolo@eniac.seas.upenn.edu RF: 443.800+ MHz 442.400+ MHz 24.150 GHz

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Date: 10 Jun 1994 09:39:07 -0700  
From: agate!howland.reston.ans.net!europa.eng.gtefsd.com!sundog.tiac.net!  
news.sprintlink.net!news.world.net!seatimes.seatimes.com!seatimes.seatimes.com!  
not-for-mail@ames.arpa  
Subject: Newbie Continues Pondering J-Poles...  
To: ham-ant@ucsd.edu

: Q: I am unclear on one small point... are the two rods meant to be  
: electrically continuous or should they be isolated from each other?  
: Based on the many design suggestions forwarded to me, I would guess  
: that they should NOT be insulated from each other.

You are correct. They should be electrically and physically connected at the bottom with the feed point at some elevated position to make the appropriate matching.

Since the bottom is electrically neutral, it can be grounded to earth ground providing a very easy path for the static buildup from rain, wind, snow, etc to drain off rather than create noise for the receiver.

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